

REMARKS/ARGUMENTS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 1, 3, 7, 9, 13-14 are presently active in this case, Claims 1, 3, 7, 13, and 14 having been amended, Claims 2, 4-6, 8 and 10-12 were canceled previously.

In the outstanding Official Action, Claims 3 and 13 were objected to because of informalities; Claims 1, 3, 7, 9 and 13-14 were rejected under 35 U.S.C. §102(b) as being anticipated by Kondo et al (U.S. Publication No. 2002/0172139 A1); and Claims 1, 3, 7 and 9 were rejected under 35 U.S.C. 103(a) as being unpatentable over Cradic et al (U.S. Patent No. 6,436,503 B1) and in further view of Kashihara et al (U.S. Patent No. 6,339,574 B1).

Applicants acknowledge with appreciation the courtesy of Examiner Muhammed and Primary Examiner Patel to interview this case with Applicants' representatives on November 19, 2007 during which time the issues in the outstanding Office Action were discussed as substantially summarized hereinafter.

In response to the objection to Claims 3 and 13, these claims have been amended to address each of the informalities noted. Accordingly, the claim objection has been overcome.

In light of the discussions during the interview, where Examiner Muhammed noted specific parts of Kondo et al and Cradic et al where molded substrates and birefringence values were described, Applicants respectfully traverse the several grounds for rejection, because in Applicants' view, the cited references fail to anticipate or render obvious the presently claimed subject matter.

Claim 1 presently defines an optical disk including:

two molded substrates molded by injection molding, bonded together,
and having information marks transferred thereto; and
a recording film disposed between the molded substrates and capable
of recording information only once by a laser beam having a wavelength of

600 nm or less is formed, and on and from which information can be recorded and reproduced, or on which a reflection film is formed so as to reproduce information from the optical disk,

wherein the ***bonded and molded substrates including the recording film*** have a magnitude of a birefringence ± 85 nm or less when measured by a double pass mode of measurement in reflection, when PRML signal processing is used to reproduce the information.

The feature of ***two molded substrates*** molded by injection molding and bonded together with a recording layer ***disposed between the molded substrates*** is shown in Applicant's Figure 3, and the double pass measurements thereof are discussed from pages 52-54 of the specification, with the last paragraph of page 52 indicating the effects of stress and distortion in the substrates.

Numbered paragraph [0173] in Kondo et al cited in the Office Action for its description of birefringence does not describe a double pass measurement from bonded and molded substrates including a recording film, as claimed, but rather describes a birefringence measurement from a single layer used in Kondo et al (i.e., a birefringence measurement from light transmitting layer 10).

These deficiencies in Kondo et al are not remedied by Cradic et al or Kashihara.¹

For instance, during the interview, Cradic et al description at col. 7, lines 51-67, was pointed out by Examiner Muhammed. That section is repeated below:

The maximum birefringence of ***a molded disk*** according to the present invention is preferably below 80 nm, and more preferably below 40 nm. In a most preferred embodiment, the maximum birefringence is below 30 nm. It is also preferable for the average birefringence to be below 50 nm, and most preferably below 20 nm. The birefringence of ***a molded optical media overlayer*** was measured with commercially available equipment such as an ODS130 Optical Disk Scanner or a Koch CS-4/TO Optitester. These devices illuminate a transparent plastic article with a circularly polarized laser beam and use a polarization-sensitive detection scheme to analyze the reflected or transmitted component of the beam. By comparing the portion of the beam polarized in a disk's radial direction with that polarized in the tangential

¹ Kashihara was applied for its teaching of "optical disk signal reproduction" and is no more relevant than Kondo et al or Cradic et al.

direction, the phase retardation can be calculated and expressed in units of nanometers. [Emphasis added.]

Thus, like Kondo et al, the description of birefringence in Cradic et al is related to a single optical component (either a molded disk or an overlayer) and does not include a birefringence criteria associated with molded and bonded substrates including a recording layer. Indeed, Applicants' position on this point is corroborated by Cradic et al's disclosure in Table I of the measured birefringence of several different types of optical disk materials.

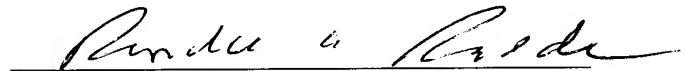
Hence, with the applied references not specifying a birefringence for a molded, bonded substrate assembly including a recording layer, the applied references do not account for stress and distortion effects in the assembly and likewise fail to disclose or suggest the elements of independent Claims 1, 7, 13, and 14.

Thus, independent Claims 1, 7, 13, and 14 (and the claims dependent therefrom) are believed to patentably define over the art of record.

Consequently, in view of the present amendment and in light of the above comments, no further issues are believed to be outstanding, and the present application is believed to be in condition for allowance. An early and favorable action to that effect is respectfully requested.

Respectfully submitted,

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